of the body and of a less regular shape; but the ascription of functions to these organs is surely in a great degree conjectural. I could detect no traces of either a vascular or nervous system; and the absence of the former seems remarkable after finding it so fully developed in *Phylline*. The skin is a thin pellucid pellicle traversed with lines in a netted manner.

The specimens from which our description is taken were found in the stomach of a conger-eel. They stuck to the villous surface by their ventral sucker, but were removable without difficulty. Their motions are very slow. The anterior extremity can be lengthened to a considerable extent, when it assumes the form of a narrow cylindrical neck; and the figure of the body is also changeable, though less so than the front. I presume it is this protean character which induced Rudolphi to call the species *Distoma polymorphum*.

Plate XV. fig. 4. *Fasciola anguillæ* of the natural size.—Fig. 5. The same magnified.—Fig. 6. The anal extremity as it appeared when evolved by pressure.

[To be continued.]

XLVIII.—*On the* Erythræa diffusa, *Woods* (*Gentiana scilloides*, Linn. fil.). By Sir W. J. Hooker. (*With some Remarks on the Genus.* By Dr. Griesbach.)

[With a Plate.]

In the year 1835 our valued friend Mr. Joseph Woods made an interesting discovery in Britany of an *Erythræa*, which he had good reason for believing to be undescribed, and to which he gave the appropriate name of *diffusa*. His account of it, in his 'Botanical Excursion into Brittany'*, is as follows.

"On the 25th of June we came to Morlaix, and on a piece of rough ground, at a very short distance south-west of the town, found an *Erythræa*, which appears not to have been previously noticed. Its characteristics are the diffuse mode of growth, without any indication of a leading stem, and the few flowers, not above two or three, in a panicle. This did not arise from late shoots, as the *Erythræa* had hardly yet begun to flower, and this may be considered as among the

* See Companion to the Botanical Magazine, vol. ii. p. 274.

earliest; nor had it been eaten by cattle, for most of it was well protected by the prickles of the *Ulex*, among which it grew; nor was it owing to that shelter, for some of it was in open and exposed situations. In all the appearance was alike, and I should propose to call it *Erythræa diffusa; caulibus diffusis subbifloris.*

"The subulate divisions of the calyx afford here no character, being sometimes quite as long as the tube of the corolla, and sometimes considerably shorter. I find a specimen of this species in the Herbarium of the late Sir James E. Smith, from the Azores, with a memorandum, in that learned botanist's hand-writing, that it is the *Chironia maritima* of the Hortus Kewensis, but not of Willdenow; the description of *C. maritima* in that work is, however, by no means such as would identify the plant, and the principal reason for the supposition probably is that it is stated to have been introduced from the Azores by F. Masson. The flowers are red."

Specimens which Mr. Woods kindly communicated to me were sent with my whole collection of *Gentianeæ* to Dr. Griesbach at Berlin, to assist him in his monograph of that natural order. That gentleman ascertained it to be a plant of Linnæus's Supplement, but unknown to every author since the publication of that work, the *Gentiana scilloides* (Linn. fil.), a species of the "Azores, found by Mr. Francis Masson." It is true that Dr. Griesbach has been led to this determination by description alone; but the correctness of his judgement is confirmed by the above observation of Mr. Woods, viz. that there exists in the Linnæan Herbarium of Sir J. E. Smith a specimen of the same plant, sent from the Azores by Masson.

The observations in Dr. Griesbach's letter to me, upon this and other species of *Erythræa*, will be read with interest.

"*Erythræa diffusa* (Woods) is indeed a new and highly interesting species, as it will serve to do away with an old name of a now unknown plant, since I cannot doubt this to be the *Gentiana scilloides* (Linn. fil.), a species insufficiently described, and of which all botanists are ignorant. The obscure terms used in the 'Supplement', though coinciding in the more important points with the plant of Mr. Woods, could hardly have suggested the idea that this is an *Erythræa*. It stands next

to *E. portensis* (Link), but it differs sufficiently by ascending stems, the form of the leaves, and length of the calyx; the latter character is indeed most important in helping to distinguish the polymorphous *Erythrææ*, as you will see by the following list of all the species which I know.

"The tube of the corolla, when in flower, is *as long as the calyx* in *E. linarifolia* (Pers.), *chilensis* (Pers.), *caspica* (Fisch.), *maritima* (Pers.), *spicata* (Pers.), and probably *E. elodes* (R.S.); it is *from one-fourth to one-third longer* than the calyx in *E. ramosissima* (Pers.), *latifolia* (Smith,—a variety of which is *E. tenuiflora*, Link), *quitensis* (Kunth), *Roxburghii* (Don), *australis* (Br.), *Mühlenbergii* (mihi), *mexicana* (mihi), and *diffusa* (Woods); *double as long* as the calyx in *E. Centaurium* (Pers.), *portensis* (Link), and *trichantha* (mihi).

"You will see that I have done justice to the *Erythrææ* of the British Flora. Those species in your Compendium are as good species as any in the system, and the English Botany is the very best basis for a correct knowledge of the European *Erythrææ*. *E. littoralis* is the same with *E. cæspitosa* (Link), and this again is a smaller form or variety of *E. linearifolia* (Pers.), which grows especially on the German sea-shores, and of which I will not forget to send you specimens. These forms have been tolerably represented in Reichenbach's 'Iconographia': there are not less than fifteen synonyms of this species.

"*E. pulchella* (Fries), again, is a smaller variety of *E. ramosissima* (Pers.), but the latter is identical with the English *E. pulchella*; to this species I also refer *E. Meyeri* (Ledeb.), having seen intermediate states, and even our form itself, from Siberia. *E. latifolia* has a straight, nearly simple, and narrow-flowered variety, also on the sea-shores of the south of Europe; this is *E. tenuiflora* (Link), or *E. centauroides* (Schrad.), or *E. arenaria* (Prest.), which occurs almost always wrongly named in herbaria, though it is a remarkably common appearance of the plant.

"Some years ago a dissertation on the genus *Erythræa* was published by M. Schmidt, but seldom have species and synonyms been so much confounded as by this writer."

The following character and description, aided by the ac-

companying figure, which was drawn from Mr. Woods's specimen, will, I trust, remove all doubts in future respecting this beautiful little plant.

ERYTHRÆA DIFFUSA.

(§ Euerythræa, *Griesb.*)

E. diffusa; caulibus cæspitosis adscendentibus inferne ramosis, ramis 1—3-floris, foliis inferioribus approximatis elliptico-subrotundis spathulatisque trinerviis, caulinis ellipticis oblongisque obtusiusculis, corollæ tubo sub anthesi calycem paullo superante, lobis tubum subæquantibus ellipticis acutiusculis. *Griesb.* MSS. Tab. Nostr.

Erythræa diffusa, *Woods, in Hook. Comp. to Bot. Mag. v.* ii. *p.* 274.—Chironia maritima, *Hort. Kew. Smith, in Herb. suo, apud Soc. Linn.* (*sed vix fide Woods.*)—Gentiana scilloides, *Linn. Suppl. p.* 175. *Willd. Sp. Pl. v.* i. *p.* 1346. *Rœm. & Sch. v.* vi. *p.* 163.

Hab. Azores, *Francis Masson.* On a piece of rough ground, near Morlaix, in Britany, *Joseph Woods, Esq.*

DESCR. Glaberrima. *Caulis* gracilis, quadrangulus, digitalis fere ad spithamæam, inferne decumbens, ramosus; *rami* elongati, erecti, subsimplices, apice 1—3 flori. *Folia* opposita, decussata, semiunciam longa, inferiora approximata elliptica vel subrotundo-spathulata, superiora magis remota, oblonga, sessilia, omnia integerrima, obtusa, nitidiuscula, trinervia. *Flores* terminales, solitarii, bini vel terni, majusculi, pulcherrime rosei; siccitate sæpe fusco-lutei. *Calyx* basi bibracteatus vel nudus, raro unibracteatus, gracilis, 5-fidus, subangulatus, laciniis subulatis erectis tubum æquantibus. *Corolla* hypocrateriformis. *Tubus* gracilis, superne angustior, ante anthesin calycem vix excedente, sub anthesi calyce ½ longior, limbo 4-partito, segmentis ellipticis patentibus, acutiusculis. *Antheræ* exsertæ, oblongæ, flavæ, spiraliter tortæ. *Stylus* longitudine staminum. *Stigma* crassum, bilobum.

XLIX.—*Prodromus of a Monograph of the Radiata and Echinodermata.* By LOUIS AGASSIZ, D.M.*

[Continued from p. 307.]

III.

THE Stellerides constitute the last order of the class of Echinodermata. Their starlike form, the mobility of their rays, which are frequently manifoldly subdivided, the position of the mouth at the centre of the inferior surface, are the most prominent external characters of this division, in which we must admit three families; the *Asteriæ*, the *Ophiuræ*, and the *Crinoïdea*. With respect to their organization Ehrenberg has recently made the interesting discovery that *Asterias*

* Translated from the Annales des Sciences Naturelles for May 1837.